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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,827	08/25/2003	Jason Clay Pearson	80013	2939
7590	03/17/2006			
Michael J. Blake Eastman Chemical Company P.O. Box 511 Kingsport, TN 37662-5075			EXAMINER EINSMANN, MARGARET V	
			ART UNIT	PAPER NUMBER
			1751	
DATE MAILED: 03/17/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/647,827

Applicant(s)

PEARSON ET AL.

Examiner

Margaret Einsmann

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 15-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 and 15-18 is/are rejected.  
7) ☐ Claim(s) 2-8 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

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This action is in response to applicant's amendment of 1/10/06. Claims 1-8 and 15-18 are pending. All pending claims are being examined in this action.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Peters et al., US 3,759,959.

The dye anthraquinone dye at the bottom of column 18 anticipates the claim wherein

$R_1=H$

$L=CONH$

$R=C_3\text{alkyl}$

$X=N(R_2)$ ;  $R_2=C_2\text{alkyl}$

$Q$ =toluene substituted with dicyanovinyl which is an ethylenically unsaturated photopolymerizable or free radical polymerizable group and

$n=1$ .

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peters et al. The dye in col 6 lines 40-47 meet the limitation of claim 1 in the following manner:

$R_1=H$

$L=\text{covalent bond}$

$R=C_2 \text{ alkylene}$

$X=NR_2$  wherein  $R_2$  is H

$Q=CO-CCl=CCl_2$

The only element missing from this dye are the nitro and hydroxyl substituents on the left ring. However, patentee includes anthraquinone dyes having said substituents as equivalent to those which are unsubstituted on the left ring in several places. See for example dye in col 9 line 25 et seq, ; the two dyes in col 16 lines 37 et seq, and the dye in col 18 lines 60-65, as well as the dyes claimed in claims 1 and 3. Accordingly it would have been obvious to the skilled artisan that the dye as claimed is included in the dyes disclosed by Peters et al.

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Regarding claim 15, it would have been obvious to one skilled in the art, a dyestuff chemist to form a concentrated composition of a known dye in a solvent for that dye, and additionally Peters states at col 10 lines 42-47 that the reactions are generally carried out in solvents, which would form a concentrated solution of the formulated dye in a solvent.

Claims 1, 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peters et al. Peters et al. is relied upon as applied in the above two rejections as disclosing the dye of formula 1 and the formation of such dyes in organic solvents. They do not, however, disclose compositions comprising the dyes in concentrated form in organic solvents, said compositions comprising antioxidant and/or UV absorbing compounds as claimed.

It would have been obvious to the man having skill in the art at the time the invention was made to formulate a composition as claimed wherein the dye of Peters is formulated into a concentrated composition comprising a solvent, UV absorbing compound and an antioxidant because it is well known in the art to provide dye compositions in the form of concentrated solutions in a solvent known to dissolve said dye for the benefits provided by said concentrated compositions, that is, ease in handling and prevention of dusting, and prevention of formation of clumps from mixing of dry dyes into coating compositions. Regarding the addition of the two additives, it is not inventive to use UV absorbing compounds and antioxidants for their known purpose.

***Response to Arguments***

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Applicant's arguments filed 1/10/06 have been fully considered but they are not persuasive. All of applicant's arguments are based on the statement that Peters does not teach or suggest each claim limitation in claim 1. The examiner respectfully disagrees with applicant. Regarding Example 8 of Peters, the Q value comprises the styryl group, C=CH phenyl which is photopolymerizable or free radical polymerizable. The statement that the dicyano group is stable is irrelevant.

Applicant argues the 103 rejection of claims 1 and 15 over Peters (Office action at p 3-4) by stating that patentee does not teach the equivalence of the dyes the examiner refers to. Since patentee teaches how to make and use the dyes substituted with nitro and hydroxyl as well as those which are not unsubstituted, he indeed teaches their equivalence, and the patent is a teaching of how to make and use all of the dyes substituting the substituents as claimed. See the table in col 17 wherein patentee teaches how to substitute R groups to form equivalent dyes.

Regarding applicant's arguments, they all depend from the premise that the dyes of claim 1 are not novel. See response to first argument above. It is suggested that applicant reviews Peters carefully, as there are other dyes disclosed which would render claim 1 unpatentable. Regarding the statement that Peters must suggest the use of UV absorbers or antioxidants, the examiner respectfully disagrees. A patent need not mention that which is notoriously well known to one skilled in the art.

Claims 2-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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No art was found to reject the compounds claimed in claims 2-8.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is 571-272-1314. The examiner can normally be reached on 7:00 AM -4:30 PM M-W and alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1316. The fax phone numbers for the organization where this application or proceeding is assigned are (571)

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273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994.

3/14/06

  
Margaret Einsmann  
Primary Examiner  
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